REMARKS/ARGUMENTS

Claims 1-19 remain pending in the application. In the Office Action, claims 1-7, 9 and 11-19 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,131,113 to Ellsworth, et al. (Ellsworth). Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ellsworth in view of U.S. Patent No. 6,507,760 to Baumgartner (Baumgartner). Claim 8 was objected to as being dependent upon a rejected base claim.

A brief summary of the Ellsworth reference may be helpful here. Ellsworth describes a process of managing a shared resource in a multi-processor system. In particular, Ellsworth discloses a data processing system having a first processor, a second processor, a shared memory and a shared resource in which the shared memory is coupled to the first and second processors and the shared resource. The shared resource is also coupled to the first and second processors. The first processor is designated as a producer or supplier of the shared resource, and the second processor is a consumer or allocator of the shared resource.

As described in column 7, lines 23-49, the first processor places in a first data element of the resource queue a pointer to an available section of the shared resource. The first processor will then increment a tail pointer for the resource queue. The first processor will continue to place the pointers to the available section in the resource queue and to increment the tail pointer until it determines – by detecting that the tail pointer is pointing to the queue end - that the resource queue is full.

In addition and as described in column 7, line 50 to column 8, line 31, the second processor, will fetch a pointer to the next available portion of the shared resource. The

second processor will then appropriately adjust the head pointer and transmit a "resource consumed" event message to the mailbox message subsystem associated with the first processor. The resource consumed message notifies the first processor that a portion of the shared resource was allocated and that an additional available shared resource section can be placed in the resource queue. As described in column 8, line 51 to column 9, line 3, in response to the resource consumed message, the first processor stores a pointer to an available section of the of the shared resource in the resource queue location pointed to by the tail pointer. The first processor will also set the tail pointer in the appropriate position.

Thus, the first processor of Ellsworth merely provides pointers for a resource queue in a shared memory in which the pointers point to available sections of a shared resource. The second processor will access the resource queue in an effort to locate available sections of the shared resource. In this arrangement, the first processor is unaware of the memory needs of the second processor, as it blindly provides the pointers to the resource queue.

Independent claims 1, 11 and 15 recite a limitation in which the first processor sends a message buffer pointer to the second processor that directs the second processor to the message buffer. This element is important because it enables the first processor to actively manage the shared memory, while at the same time it eliminates the requirement that the second processor actively manage the shared memory. Specifically, the first processor can receive a request from the second processor and can reserve or allocate a known portion of the shared memory for the second processor, the location of which – in accordance with the claim language - can be forwarded to the second processor. In direct contrast, the second processor in

Ellsworth does not receive such as message from the first processor, and as a result, the second processor actively searches for available portions of the shared resource.

Moreover, because the first processor in Ellsworth does not send message buffer pointers to the second processor, the first processor is unaware of the actual memory needs of the second processor. In other words, in Ellsworth, the first processor blindly makes portions of the shared resource available to the second processor. This method of providing portions of a shared resource is inefficient management of the shared resource. Even worse, this inefficiency is compounded as the number of processors in the system to which the first processor must provide portions of the shared resource increases. Such is not the case with the present invention in view of the first processor knowing the memory needs of any number of processors and the first processor's ability to signal these multiple processors with address pointers.

The Applicants also respectfully disagree with the Examiner's contention that the limitation of "the first processor sends a message buffer pointer to the second processor that directs the second processor to the message buffer" is shown in Ellsworth. Notably, on pages 2, 4 and 5 of the Office Action, the Examiner explains that this limitation is shown in column 8, lines 40-50. This particular section of Ellsworth describes the transfer of a "resource consumed" message from the second processor (i.e., the resource consumer) to the first processor (i.e., the resource provider). This section simply does not show, describe, teach or even suggest the concept of the first processor sending a message buffer pointer to the second processor that directs the second processor to a message buffer.

In view of the above, Applicants believe that independent claims 1, 11 and 15 are patentable over the prior art. Applicants also believe that those claims that depend from

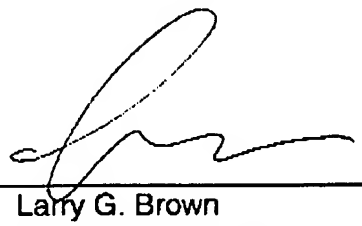
independent claims 1, 11 and 15 are patentable, both based on their dependencies on the independent claims and their patentability on their own. Reconsideration and withdrawal of the rejection of the claims is respectfully requested. Passing of this case is now believed to be in order, and a Notice of Allowance is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicants' attorney or agent at the number indicated below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

The Commissioner is hereby authorized to charge any necessary fee, or credit any overpayment, to Motorola, Inc. Deposit Account No. 50-2117.

Respectfully submitted,



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